REPORT DOCUMENTATION PAGE

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4. TITLE AND SUBTITLE

Geoclutter Target Moorgins

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5b. GRANT NUMBER
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5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

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5d. PROJECT NUMBER

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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

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12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

An air-filled aluminum tube array was designed and constructed to function as an acoustic target for the Geoclutter field experiment. This horizontal array consisted of four 6-inch schedule 10 aluminum pipes 20 feet (6m) long attached to a depressor weight constructed of steel bar. The array was designed to be directionally oriented from the deployment vessel by dragging from the attached deployment/recovery mooring pennant.

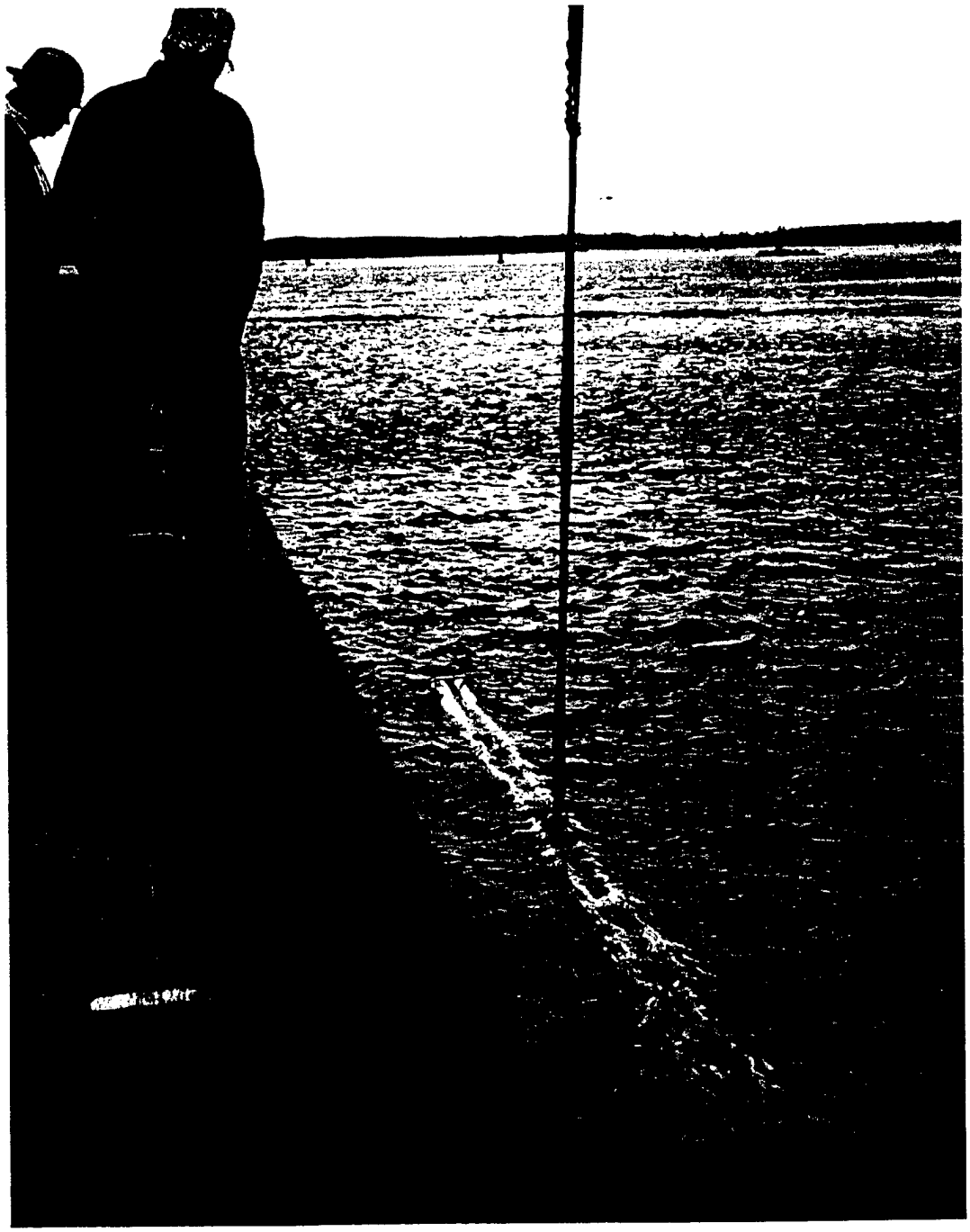
15. SUBJECT TERMS

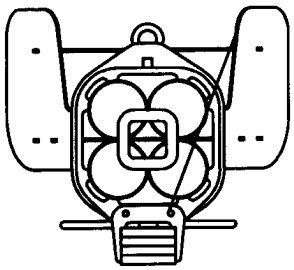
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Donald B Peters
Unclassified	Unclassified	Unclassified	Unlimited	5	19 b. TELEPHONE NUMBER *(Include are code)* (508) 289-3377

The Geoclutter target was designed to meet the following specification:

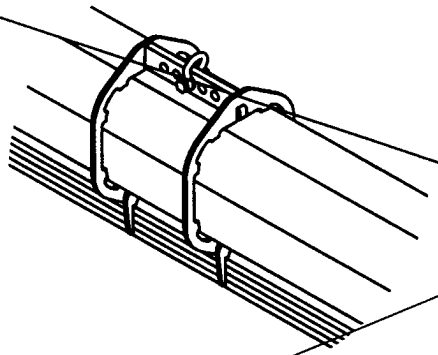
- Length 6m
- 4 Air-filled aluminum 6-inch schedule
- 10 pipes in a square bundle
- Sufficient weight to result in approximately 500 lb wet weight
- Ability to orient directionally by dragging
- Attachment point for deployment/recovery mooring penant
- Tagline bales at ends for handling

Attached are an overall dimensioned drawing and two photos of dock testing the target. The target was used successfully in the Geoclutter field experiment for Nick Makris of MIT.





DETAIL A
SCALE 1:20



DETAIL B
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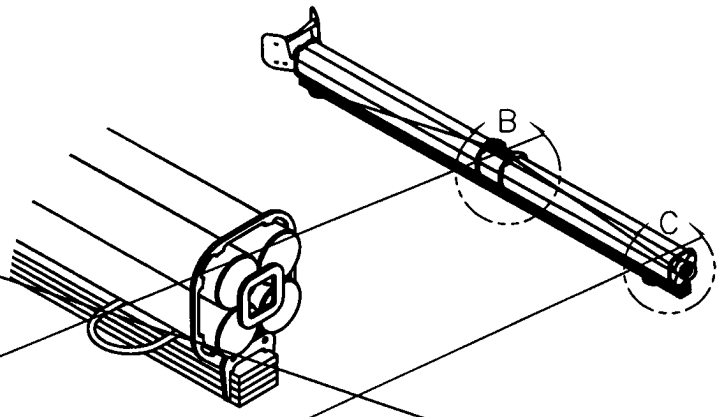

DETAIL C
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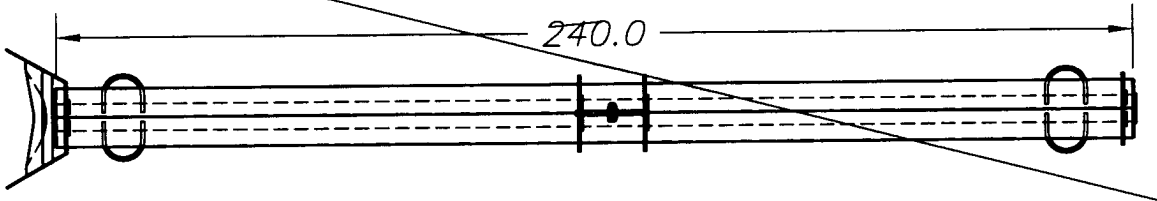

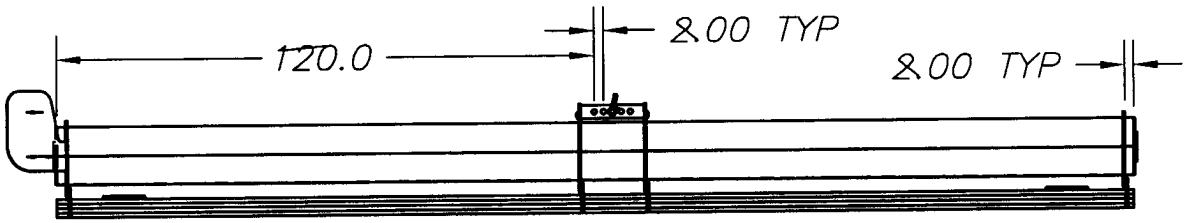

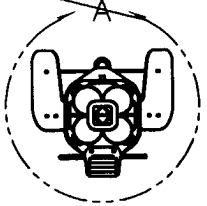

PICK ANGLE VS LIFT OFFSET

WEIGHT = 1926
BUOYANCY = 1453
WET WEIGHT = 473

hW = 18.62
hB = 10.69

Pick Offset	Pick Angle	Subm Angle
2.00	6	3
4.00	12	5
6.00	18	8
8.00	23	11

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ANGULAR
.XX ±.01 ±1°
.XXX ±.005
DO NOT SCALE DRAWING

PROJECT NO.

DESIGN DON PETERS DATE 04/18/03

DRAWN BY

CHECK

MATERIAL AS NOTED

FINISH AS NOTED

WOODS HOLE OCEANOGRAPHIC INSTITUTION
APPLIED OCEAN PHYSICS & ENGINEERING
WOODS HOLE, MASSACHUSETTS, 02543

TITLE GEOCLUTTER TARGET ASSEMBLY

SIZE DWG NO. 155-0-0000

SCALE RELEASE DATE SHEET OF